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SOYBEAN DEMAND GOOD; RECORD CROP POSSIBLE

Good growing weather has improved yield prospects for the maturing 1957 soybean crop and brought the possibility of a record harvest.

Production from the record 22.6 million acres planted to soybeans this year was estimated on September 1 at 459 million bushels. Domestic and export markets are likely to continue at the high level of the past season.

Both acreage and output have increased steadily in recent years. The anticipated 1957 production is a new record, 69 percent larger than the 10-year average.

If growers carry out early season intentions, about 21.6 million acres will be harvested. The estimated yield of 21.2 bushels per acre is 0.6 bushel less than last year's near record but about a bushel above average.

Late growing season weather was generally favorable. Moisture was adequate in most States. Temperatures were moderate but warm enough to speed development. For the most part, the 1957 crop is much later than last year's early crop.

Prices have consistently averaged above support levels, with carryover stocks consistently small. The Commodity Credit Corporation did not take over significant quantities of beans until the 1956 crop year. It acquired about 25 million bushels on May 31, 1957, and sold nearly all of them by early August. Farm prices in the past 2 years have averaged above support.

The 1957 support price is $2.09, and prospects are that farm prices during harvest will average near that level. The size of foreign crops, which will not be known until early 1958, will have some influence on the price range for U. S. beans later in the season.

Foreign and domestic demand in 1957–58 is expected to be relatively strong again. But U. S. fats and oils may meet increased competition because the supply situation has improved in some foreign countries.

If prices at harvest are no more than moderately above support, holding soybeans for later sale would appear to be a reasonably good risk. The support price would tend to set a floor under the market, at least through January 1958, with good possibility of the usual seasonal rise.

On the other hand, any significant rise in bean prices in the months after

harvest would seem to be a signal to sell, unless the fats and oils situation changes greatly.

Assuming an October 1, 1957, carryover of around 10 million bushels of soybeans and a crop of 459 million bushels in 1957, total supply in 1957–58 would be around 470 million bushels, at least 10 million bushels more than in 1956–57.

Soybean exports, following the upward trend of recent years, likely will continue to increase in 1957–58. They may total around 90 million bushels, if economic activity abroad continues high. Exports from the 1956 crop are likely to set a new record of about 84 million bushels.

Strong domestic and export demand for edible vegetable oils will encourage a heavy crush of soybeans, perhaps about 325 million bushels. This would be 10 million bushels more than estimated for 1956–57. A crush of this size would produce 3.6 billion pounds of soybean oil and 7.6 million tons of soybean cake and meal.

Estimated seed requirements for the large acreage expected for the 1958 crop will total about 30 million bushels.

Exports, crushings, and use for seed account for most of total disappearance. If estimated requirements for these outlets are substantially accurate, about 25 million bushels will be carried over on October 1, 1958.

Food Fats and Oils Production

About 80 percent of the U. S. supply of food fats and oils is made up of soybean oil, cottonseed oil, and lard. Their total production probably will reach about 8.8 billion pounds in 1957–58, including the oil equivalent of soybeans exported. Soybean oil output of 4.5 billion pounds would make up more than half this total.

Lard output may total 2.7 billion pounds, an increase of about 2 percent. Based on September 1 indications, cottonseed oil production is likely to decline to about 1.6 billion pounds, down about 4 percent.

For the past several years, combined U. S. output of the 3 major fats and oils has exceeded domestic use by about 1.5 billion to 2.6 billion pounds annually.

These supplies have moved into foreign markets. Favorable world markets have been sustained by increasing populations and improved standards of living in many countries. U. S. Government export programs also have provided an impetus to sales.

Stocks of food fats and oils in the U. S. on October 1 were estimated slightly smaller than a year earlier and the smallest since 1951. Carryover stocks of lard, cottonseed oil, and soybean oil are placed at 480 million pounds, about 120 million pounds less than on October 1, 1956. This is smaller than in some recent years but still adequate as a working inventory.

Assuming the output and carryover estimated above, total supply of the 3 major food fats and oils in 1957–58 will be 9.3 billion pounds, compared with 9.2 billion pounds in 1956–57.

If domestic disappearance per person holds at about last year's level, the quantity of food fats and oils (including oil equivalent of soybeans) available for export in 1957–58 would about equal the estimated record of 2.8 billion pounds shipped in 1956–57.

This, in turn, would leave a carryover on October 1, 1958, about the same as a year earlier.

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WHAT KIND OF POULTRY SALES NEED NEW USDA INSPECTION?

United States Department of Agriculture inspection of poultry moving in interstate commerce recently became Federal law. How will you poultry growers be affected?

If you sell only live birds—not at all, except perhaps indirectly. You need not apply for Federal inspection. That's also true if you process poultry you yourself raise to sell directly to consumers, hotels, restaurants, or boarding houses but not to other outlets.

Operations Affected

But if you are engaged in any other kind of interstate dealing in poultry meat foods—that is, in dealings of any kind except in live birds—then you are required to have your poultry inspected after January 1, 1959.

The new law says specifically that by January 1, 1959, all poultry or poultry products moving in interstate or foreign commerce, or in designated major consuming areas, must have been inspected for wholesomeness. The containers in which these products are packaged must have been properly labeled and carry the official inspection mark.

Compulsory inspection is expected to benefit the poultry producer. It will not only prevent movement of unwholesome and adulterated products in commerce but also help to equalize competition between areas and poultry processors.

Most important of all: It should increase the consumer's confidence in the kind of poultry he can buy. This should stimulate sales of poultry, definitely broaden the producer's market.

The new compulsory inspection will be handled by the same agency that has been conducting the voluntary inspection program for the past 30 years, the Inspection Branch of the Poultry Division, Agricultural Marketing Service.

The voluntary program, costs of which are paid by the applicant, will be continued for those not subject to compulsory inspection. Costs of compulsory inspection are paid by the Federal Government.

For the many processors who already subscribe to the voluntary service, the switch to the compulsory program will mean very little change. Probably in most cases, it will amount to little more than filling in the proper application forms.

If you wish, you can apply for the compulsory service after January 1, 1958. When you receive the service, you will be subject to all the provisions of the new law.

Suppose your sales are only partly in interstate commerce? You will still be required to have poultry inspection, and all poultry processed in your plant must be inspected.

If you have not previously had inspection service, you may find that some additions or modifications of your buildings or equipment are necessary to qualify. The requirements for obtaining service will be spelled out in regulations which may be obtained from the Poultry Division.

Major Consuming Areas

The "designated major consuming areas" mentioned in the new law will be major population centers, selected by the Secretary of Agriculture upon application from State or local officials or local poultry industry groups.

A public hearing will be necessary before the area is finally designated. Once it has been, all poultry food products moving in or through this area will be under the same requirements as though moving in interstate commerce.

Hermon I. Miller
Director Poultry Division, AMS

CURRENT HOG PRICES GOOD BUT WHAT ABOUT 1958?

Hog producers will remember 1957 as a fairly good year. Prices have been the highest in 3 years, they are above an average ratio to the price of corn, and at one point (mid-August) they were even within 8 percent of parity.

But unfortunately the industry is like the lady who, told she was looking fine, replied fretfully that she felt bad yesterday and probably would feel bad tomorrow. It seldom trusts a favorable situation to last long.

Previous Price Plunges

Past instability has indeed been severe. In 23 months of 1948–49, prices to producers fell 44 percent; in 22 months of 1951–52 they dropped 26 percent, and between April 1954 and December 1955, 60 percent.

The last 2 swings in hog prices each lasted 3 years. Lows came in Decembers of 1949, 1952, and 1955. By the same sequence, the next low would be expected in December 1958.

Of course, it doesn't have to happen that way. But the past warrants caution in planning for 1958 spring pigs. An overexpansion in production would raise serious danger of price collapse during the fall of 1958.

The price outlook is still favorable for the near future. After decreasing 8 percent in 1956, the spring pig crop remained unchanged in 1957. In June, producers planned only a 2-percent increase in 1957 fall farrowings.

According to a September report from 10 States, the fall crop might be up slightly more than 2 percent, but the increase, in any event, will be moderate. These very small changes in 1957 pig numbers mean that pork supplies for the first 6 to 8 months of 1958 will not be much above those of 1957.

The $21 to $22 prices received for hogs this summer were in part a happenstance. They were lifted by a reduced supply of pork in cold storage for summer sale. Prices this fall will decline much more than in the fall of 1956. By winter they may be below those of last winter. Nonetheless they offer promise of holding near 1957 levels during the winter of 1957–58, the spring of 1958, and perhaps part of the summer of 1958.

All signs point to an increase in the spring pig crop in 1958. The hog-corn ratio has been above 13 since last December and above 15 in 4 months, compared with a longtime average of around 12. A ratio this high almost invariably is followed by a larger number of farrowings.

Although the corn crop is smaller this year than last, the oats, barley, and grain sorghum harvests are larger. Production of all feed grains is a little above last year's bumper output.

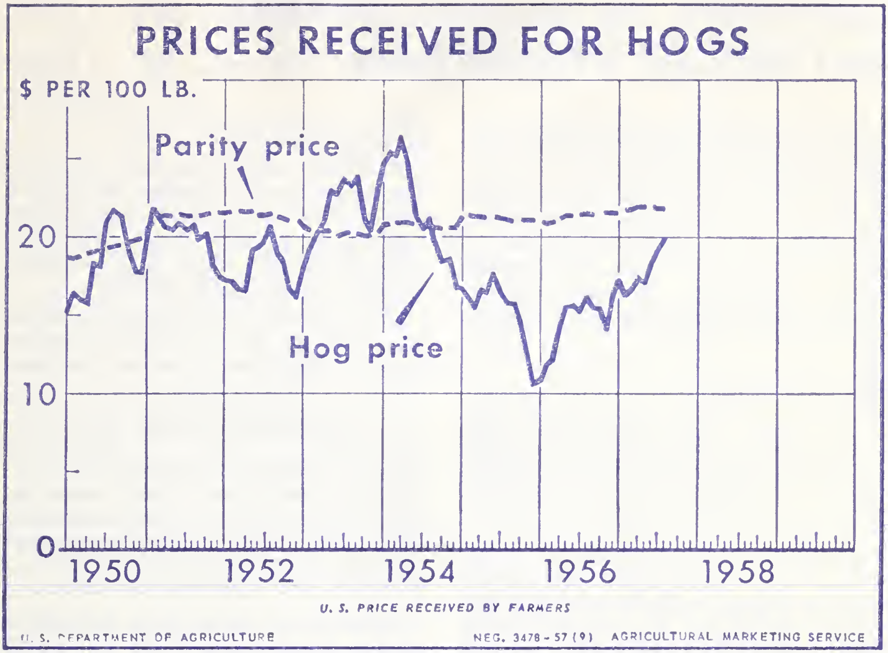
Producers themselves have indicated that they plan to step up their spring farrowings. Those in 10 States expect to have 7 percent more December, January, and February farrowings than last year.

Personal Pork Supplies Low

Some increase in hog production and in pork output could be accepted without seriously undermining prices. While production has been marking time, the population has continued to grow and it will grow further in the next year. The supply of pork available per person this year has been as low or lower than in any year since 1938, except 1954.

Moreover, the supply of beef will in all probability be on a downtrend for the next year or so.

On the other hand, in recent years the market for pork has not distinguished itself by strength or resiliency. Consumers' expenditures for pork have sagged slowly but steadily from their high in 1951.



Since the end of World War II, annual pig crops have increased at an average of hardly one-half of 1 percent a year. This is much slower than the rate of increase in population.

Consumption of pork per person has decreased by about three-fourths of 1 percent per year. Present efforts to improve the quality of pork may help to reverse this decline in demand, but results will hardly be apparent in 1958.

As hog production will almost surely increase in 1958, prices in the fall of 1958 will probably be lower than this fall. The evidence isn't yet clear whether an overexpansion and price collapse are in prospect or whether changes next year will be more moderate. The hog-corn ratio is not a clear guide; it is at an in-between level.

Producers' plans for December–February are far from conclusive concerning the entire spring season, since most farrowings are in February, March, and April. But in view of severe limitations of demand, prospective trends in hogs for 1958 are in the danger zone.

Producers would be unwise to count on prices next fall as high as this fall. They can profitably be alert for further evidence. The pig crop report of December 20, revealing producers' intentions for the entire spring season, will be especially worth watching.

Harold F. Breimyer
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Farmers' Prices

(1910–14 = 100)

Date	Prices received by farmers	Parity index [1]	Parity ratio
Sept. 1954	246	280	88
Sept. 1955	235	279	84
Sept. 1956	236	287	82
July 1957	247	295	84
Aug. 1957	248	295	84
Sept. 1957	245	296	83

[1] Index of prices paid, interest, taxes, and wage rates.

SORGHUM GRAIN MAY DOUBLE 1955 RECORD PRODUCTION

A 1957 sorghum grain crop of 481 million bushels, double the 1955 record, was forecast September 10.

This huge volume puts sorghum among the leading crops produced in the nation. It ranks at the top this year in sections of the High Plains of Texas northward through western Kansas and Nebraska and eastern Colorado.

Record Plantings

This great crop is largely the result of a record planted acreage, aided by the best soil moisture for years in most dryland sections of the Great Plains. But there are other factors.

Extensive pump irrigation in the Texas and Oklahoma panhandles, western Kansas, eastern Colorado, and central Nebraska has upped yields greatly in the past few years. Finally, there has been gradual expansion in the use of improved combine-type hybrids.

Farmers in irrigated sections of the Great Plains States planted from one-fourth to one-half of the 1957 sorghum acreage with hybrid grain varieties. The percentage was much lower but still significant in western dryland areas.

Somewhat extensive hybrid plantings were also noted in the more humid eastern area of the Great Plains and States farther east—notably Missouri, Mississippi, Kentucky, and the Carolinas.

Plant geneticists started working toward developing hybrid sorghums in 1921 when the U. S. sorghum grain crop was only 15 percent of today's figures.

Progress was slow because there was no simple procedure that would make sorghum plants only female for complete cross pollinating or hybridization. The present method of seed production was developed in 1952.

The large supplies of hybrid seed for 1957 planting came largely from seven grain sorghum hybrids developed cooperatively by the U. S. Department of Agriculture and the Texas Agricultural Experiment Station.

Planting seed of these hybrids is white but the commercial grain crop produced is red. These hybrids are reported to produce yields possibly a quarter greater than the standard varieties of the same maturity.

This year will furnish the first wide-scale test of the new hybrids under farm conditions. Many farmers planted a small acreage of one or more hybrids along with a large acreage of the combine varieties and will be in a position to appraise yield differentials.

Seed from these hybrid sorghum fields should not be planted since the yield increase is largely lost and plants would be highly variable in seed color, maturity, and other characteristics.

Lodging is a real problem to farmers raising dwarf varieties as the heads passed over by the combine represent substantial harvesting loss. Since the hybrids have large heads and often are slightly taller than the standard varieties, more lodging may occur.

With this is the problem of drying the grain for safe storage in the more humid sections. Commercial driers in sorghum areas can expect a big run on the use of their facilities this year unless October weather is very dry.

Exports Important

The large sorghum grain production of recent years has not all been absorbed in the domestic market. Over a third of the 1955 crop and a sixth of the smaller 1956 crop were delivered to the Government as a result of the price support program.

In recent years, some of the Government-owned grain has been used in the domestic Emergency Feed Program but most is exported. Europe and the Near East import the grain primarily for feed. India and other Far East countries use the grain largely in a home-ground meal.

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FALL POTATO PRODUCTION MAY BE DOWN ONE-TENTH

At this time of year the question always arises as to the prospective supply for potatoes and how the official reports should be appraised.

While comparisons are often made with a previous year or group of years, no two potato seasons are the same. Normally a large crop will be sold at a relatively low price, while a small crop will bring a good price.

Numerous Factors Involved

However, increased consumption because of a larger population, increased use of potatoes for processing, and changing habits of individuals all play an important part in the movement and price of potatoes.

The fall production, based on September 1, 1957, prospects, has been placed at 151,261,000 hundredweight. This would be about 10 percent less than the 166,634,000 hundredweight harvested in 1956 but 1 percent above the 1949–55 average production.

In the 1957 Acreage Marketing Guide, the U. S. Department of Agriculture suggested a fall potato crop of 141,108,000 hundredweight. This suggested production would be sufficient to cover anticipated needs. However, the September 1 estimate is about 10 million hundredweight above the Marketing Guide suggestion.

The distribution pattern of the 1957 crop differs from that of 1956. The Eastern States have in prospect a crop of 57 million hundredweight, about 10 million hundredweight below the 1956 production. The Central States, with 34 million hundredweight, are 7 million down from last year.

On the other hand, the Western States are up 2 million hundredweight from 1956 to about 60 million hundredweight. Percentagewise the Western States have increased their share of the fall crop this year, but the position of the Central and Eastern States has declined.

The September estimate of production in the Central and Eastern States is only slightly above the marketing guide, while the prospective production in the Western States is substantially above the suggested marketing guide.

The September 1 estimate assumes average weather conditions until harvest has been completed. Excessive early September rains in the Red River Valley of Minnesota and North Dakota may cause some additional adjustments in these figures. Lateness or earliness of freezes is another important factor to be considered.

Currently, about half of the fall potato crop is under marketing orders. These orders regulate the size and grade of potatoes for all fresh and some processing uses. In the 1957 marketing season these orders will have a large influence on the marketing of potatoes.

However, USDA marketing specialists have been quick to point out that the job will not be done by marketing orders alone and have suggested that potato growers in other areas take steps to provide local nonfood outlets for their excess supplies.

Supplies Important

Growers should also follow an orderly marketing procedure and be guided by the supply situation. This situation is shown in the October, November, and December crop reports and in USDA's expanded stocks service: Fall potatoes on hand each December 1, January 1, February 1, and March 1.

While the production of winter potatoes in Florida and California is small compared with the storage holdings of fall potatoes, it is interesting that producers intended on September 1 to reduce 1958 winter potato acreage 21 percent below that of 1957. However, even this figure is 7 percent above the 1956 acreage.

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HOW CAN DAIRYMEN DECIDE WHETHER TO USE TANKS?

Why are increasing numbers of dairy farmers shifting from 10-gallon cans to cooling their milk in bulk tanks at the farm and shipping by tank truck to market?

When the tank trucks begin hauling milk between farms and plants in your area, what will the shift mean to dairymen? How will it affect their market outlets and prices for milk? Their costs? In short, their ability to compete successfully?

Shift to Tanks Uneven

By early 1957 there were 10 farmers with bulk milk farm tanks for every 1 in 1953, an increase from 6,000 to nearly 60,000 throughout main United States dairy areas. Yet the shift to bulk assembly has been uneven, proceeding rapidly in some milksheds or markets, more slowly in others.

Among the leaders in installing bulk equipment have been smaller plants, direct-delivery markets where all milk is drawn from farms close to the plant, and higher-price local or secondary markets within the milksheds of main metropolitan areas.

Let's examine some of the factors in this rapid but spotty growth. First, dairy farmers shipping milk in these higher-price local markets usually have had substantial price incentives to convert to bulk.

Take, for example, local markets in southern New England, adjoining the milksheds of regulated metropolitan markets in Boston and New York. Or in the Midwest, local markets in the Chicago milkshed. In areas supplying these local markets, prices paid farmers for milk have been well above the large surrounding milkshed.

As the plants receiving their milk are converted to bulk, farmers already shipping milk to these local markets have an incentive to go along. They may lose their outlet and better price if they do not install tanks.

Farmers now receiving the New York or Boston or Chicago "blend" prices also have an incentive—they may be able to change outlets and get the higher local-market prices. In areas supplying these local markets farmers have installed bulk tanks at a rapid rate.

Second, most milk plants can realize some savings in costs of assembling, receiving and cooling milk, and many plants have paid price premiums to farmers based on these cost savings, as an incentive to install tanks.

Smaller plants, and others that can readily convert completely to all-bulk operations, are able to make larger savings in plant cost than those where milk is received by both can and tank and where equipment and labor are less fully utilized. Thus, they may be better able to offer premiums.

But many larger plants in the city have another potential source of savings in the possibility of bypassing and eliminating cooling and reloading of milk at country receiving stations. Thus, they may be able to offer premiums also.

Basis for Net Returns

So far, we have examined some of the main factors affecting a dairyman's milk price and his market outlets, when the shift to bulk milk equipment commences in his area. But these are only part of his problem. Naturally, a dairyman's net returns are based on both prices and costs. How are hauling cost and farm cooling cost affected by the change?

Hauling costs may be affected in 3 ways. Charges to farmers for hauling their milk to market are commonly lower on bulk than on can routes. Then, some milk handlers have eliminated payment of subsidies to haulers, formerly a widespread practice with can hauling, and farmers are now paying the full cost of hauling. Finally, some haulers on converting to bulk have replaced flat-rate or uniform hauling charges with a system of

charges varying with the volume of milk and the distance hauled.

This adds up to hauling charges being more closely related to real costs on bulk routes. Naturally, the possibility of a farmer being charged lower hauling rates if he installs a tank will depend largely on possible savings in route operating costs. Such savings depend largely on increased milk volume per truck, per day, and per mile, from route reorganization, hauling more than one load daily, and skip-day collection of milk with bulk.

Farm Costs

Now, what about farm cost? Although cooling cost may be about the same to somewhat lower for dairymen with larger-than-average milk volume, it is likely to increase greatly on many farms.

Without price incentive or reduced hauling cost, many average or small dairymen may find that it would be unprofitable for them to install tanks just yet. So far it's mostly the big farmers who go bulk first.

For example, from half to two-thirds or three-fourths of farm tanks in most markets studied hold 200 to 400 gallons of milk, larger than even 2 days' production for "average" dairymen. In the major regulated markets farmers using tanks ship 1.5 to 2 times as much milk as farmers using cans.

Now, doesn't this mean extensive adjustments may be needed among can shippers with a few cows and low milk production? The average or small dairymen will have incentives to expand.

For example, the larger the tank, the less it costs per gallon of capacity. Moreover, cooling cost per hundredweight is higher with skip-day collection of the milk, and producers with smaller milk volume are most likely to be those with milk collected every other day.

There are advantages that help offset the increased cost. The farmer is paid for more milk, because any loss of milk and butterfat from spillage or container stickage is the plant's loss with bulk hauling, the farmer's loss with cans. Then handling the milk and cows at morning and evening milking takes less time with bulk than with can cooling, and the work is easier because there are no heavy cans to lift.

How about the dairymen who stay with cans?

First, their outlets. It appears likely they will have market outlets for their milk for some years to come, perhaps until existing can-receiving, can-hauling, and can-cooling equipment at plants and on collection routes eventually need replacing or are completely depreciated "off the books."

Second, their prices. They may receive relatively lower prices compared with bulk shippers by not being able to sell milk in higher-price local markets, or by not qualifying for the price premiums being paid bulk shippers.

Third, their costs. They may have less investment in milk cooling equipment and lower costs of farm cooling, especially if they are small producers. However, they may have problems in meeting cooling requirements of the sanitary authorities.

As more farmers convert to tanks, the cost and price picture for can shippers may change. Can shippers may have to pay higher hauling rates, because it will cost more to serve their fewer and more widely scattered farms. Eventually they may find a discount applied to their milk price, to cover the plant's higher cost for receiving and cooling can milk.

Now, what's the net effect of the trend to bulk tanks likely to be?

Better Returns Possible

For the dairy farmer the coming of bulk farm milk tanks may mean better returns for his milk and easier work in his barn. For the small-volume producer, the general or part-time farmer who produces some milk for sale, it may mean eventually a strong incentive either to shift out of dairying or to grow into larger commercial-scale dairying.

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Outlook

Farm Income

Marketings in the first 8 months of 1957 were down slightly from a year earlier, but higher average prices boosted farmers' receipts slightly to about $17.6 billion. Receipts from livestock and products at $11 billion were 5 percent higher. Hogs, cattle, and milk brought somewhat higher receipts, but chickens and eggs were down. Crop receipts of $6.6 billion were 5 percent below last year, mostly because of declines for cotton, wheat, and potatoes.

Farmers' net income in the third quarter of 1957 was $0.5 billion above the third quarter annual rate in 1956, according to estimates based on July and August figures.

Somewhat higher Government payments, mostly from the Soil Bank, and higher cash receipts contributed to the net income gain. In the first half of this year, net income was at a rate of $12.1 billion, compared with $11.8 billion in the first half of 1956.

Livestock

Marketings of most meat animals in the next few months are expected to build up from recent seasonal lows, but they will fall short of a year earlier. Although prices will decline, they will hold at a level above the fall of 1956.

Reports from farmers indicate increasing hog production this fall and next spring. About 4 percent more sows are expected to farrow fall-crop pigs in 10 Corn Belt States than in 1956. This is a slightly larger increase than was indicated last June. Corn Belt producers also report they plan 7 percent more sows to farrow in December 1957–February 1958 than a year earlier.

Dairy

Both milk output and average prices for milk were a little above the levels at this time last year. Consumption of ice cream has increased slightly. Fluid cream use continues down, though consumption of most dairy products is near last year's level.

Poultry and Eggs

The number of layers on farms is likely to be about 5 percent less at the end of 1957 than at the end of 1956. Chicks raised for flock replacement this year are down 18 percent but farmers are likely to keep a larger percentage of pullets and hold more mature layers for a second year of production. Decline in egg production is not expected to exceed 2 to 3 percent because of the upward trend in the rate of lay.

Farm prices for eggs will average above a year earlier in the next 6 to 8 months. Turkey prices are expected to strengthen through the rest of 1957. Marketings have been heavy so far this year, and the number remaining to be sold probably is somewhat smaller than in 1956. But storage stocks are the largest on record.

Flaxseed

Prospects for the 1957 crop fell sharply during August. Output of 32 million bushels is now expected to be a third below the 1956 harvest and the smallest since 1952. However, this year's production will about meet expected domestic use in the coming season.

Cotton

With this year's crop set at 12.6 million bales, plus carryover of 11.2 million bales on August 1 and a small quantity of imports, total supplies for 1957–58 are expected to be about 23.9 million running bales.

This total would fall below the record 27.6 million bales available in 1956–57. Disappearance is also likely to be down this year because exports are not expected to equal last season's high level. However, it is likely to exceed production, and another reduction in carryover is likely at the end of the 1957–58 season.

"Bert" Newell's Letter

Every now and then someone wants to know if the characters I write about are real people or just made up. There's old Jim and Uncle Pete, the Colonel and Doc, and others.

They are, or were, real honest-to-goodness people. I'll admit that for Doc I used a fictitious name because, so far as I know, he's still operating, and I didn't think I should use his real name. The Colonel is still going strong too, but there are so many colonels, I didn't think that one would do any harm.

Now, there's another man I want to tell you about but he has been gone so long I know it won't make any difference if I use his real name.

This Mr. Ives was a wheelwright and a good one. He had a long white beard and we kids called him Santa Claus sometimes—partly, I guess, because he was such a kindly gentleman and would nearly always stop to fix most anything a kid brought to him. His shop was a good-sized one for the time. There were two smiths who did most of the horseshoeing and forge work but Mr. Ives was the owner and the real craftsman.

I used to love to hang around and watch him. He could do anything, but I liked best to see him weld a tire, shape it, then build a fire around it, and shrink it on to a wheel. It took a real smith to do a good job and I don't suppose there are many of them left.

Some of you certainly remember that some pretty good arguments could get started around the blacksmith's shop. When I got to the point when someone was about ready to start swinging, Mr. Ives would step in and say: "Now, it isn't any use pounding the point any more. If your argument is going to stick, it will stick, and more pounding ain't going to do it any good, so let it cool off."

It wasn't until sometime later that I realized just what he meant by that. When I was learning to weld, I found out that the secret of a good job was, of course, the right heat, flux, and all that. But when everything was right, the first few "strikes" told the story. You can't make a good weld by beating it to death on the anvil.

As a matter of fact, I was told not to pound the weld any more than you had to, to get it in the proper shape. I guess one of the biggest thrills I ever got was when two of the smiths asked me to "strike" on a weld they were making.

It finally dawned on me that was the analogy Mr. Ives was making, when he stopped the arguments. Apparently his philosophy was, get your facts in order, state them clearly, and then strike with your arguments, strong and square. If it is going to stick, it'll stick, and a lot more talk won't do any good.

I am certainly not smart enough to apply this effectively all the time, but it is still a pretty good philosophy.

In our Crop Reporting Board sessions, we have followed pretty much this same idea. After the reports are in and the doors locked, we have a pretty big welding job to put all the pieces together and come out with a national report that will stand the severe strain of minute scrutiny and criticism.

Each Board member reviews all of the material, prepares his facts. Then, laying his facts on the table, he strikes a square, firm blow with the very best judgment he can bring to bear. We don't have time to talk a subject to death in a Board meeting, so each member has to get his facts straight and put his point over in the minimum of time. We can't claim that our welds are always perfect, but over a period of many years they have stood up well.

Blacksmiths' shops are great institutions. I think my kids missed something. They never sat on a nail keg and watched a smith shape up a horseshoe and then, when the job was done, strut out with a horseshoe nail ring to flash to the envious kids around school.

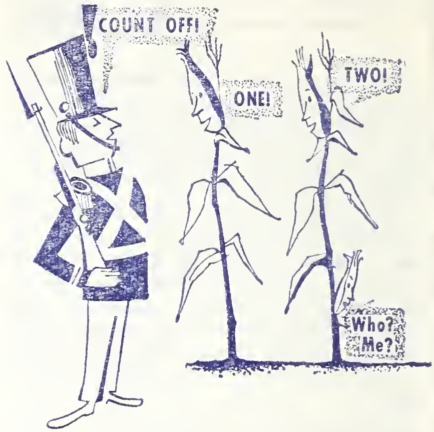
S. R. Newell

S. R. Newell
Chairman, Crop Reporting Board, AMS

HERE'S HOW FORECASTERS ESTIMATE CORN YIELDS

Agronomists and crop forecasters often estimate stand and yield in corn fields by counting plants and ears in measured row sections.

Such counts can be converted to estimates of numbers of plants and ears per acre if we know what fraction of an acre is represented by the row sections where the counts are made.



Research on Subject

A simple method has recently been worked out by Arthur M. Brunson of USDA's Agricultural Research Service, stationed at Purdue University, Lafayette, Ind., for measuring row sections and figuring the estimated number of corn plants per acre.

It is necessary to measure off a row section that represents one one-thousandth of an acre. Multiplying the number of plants counted in such a section by 1,000 gives the estimate directly. The length of row section needed to represent one one-thousandth of an acre depends upon the average distance between rows, as shown in the following table:

Average distance between rows	Length of row section that represents 1/1000 acre	
Inches	*Feet*	*Inches*
36	14	6
37	14	2
38	13	9
39	13	5
40	13	1
41	12	9
42	12	5

The average distance between two rows can be obtained easily by measuring the distance across a dozen or so rows of corn in the field.

When the average row spacing is known, the length of row section to be measured can be read from the table. For row widths not given in the table, the proper length of row section for any given spacing can be figured very simply.

There are 6,272,640 square inches in an acre. Dividing that by the average row spacing in inches gives the total number of inches of corn row in an acre. Dividing that figure by 1,000 gives the number of inches of corn row in one one-thousandth of an acre. Dividing again by 12, converts that figure into feet. Fractions of a foot can be expressed in inches.

Mr. Brunson recommends measuring off about 10 such random row sections in a field and counting all plants that fall in those sections. Dividing by 10 gives the average count for one one-thousandth of an acre. Multiplying this by 1,000 gives an estimate of the number of plants per acre.

Sample Must Be Representative

More row sections can be used, if greater accuracy is needed. The object, of course, is to get a representative sample for the entire field. Statisticians of the Crop Reporting Board, who have had much experience with methods of this kind, point out that all parts of the field must have a chance of getting into the sample.

This means that when part or all of a row section falls on a blank spot in

the field, that row section should be used. If blank spaces are skipped and row sections taken only in the better parts of the field, the average count for the field will be too high.

Although Mr. Brunson's report is confined to estimating the number of plants per acre, the same idea can be used to estimate the number of ears per acre. Multiplying the number of ears counted in the average row section by 1,000 gives an estimate of ears per acre.

It is also possible to carry the calculations one step further to forecast the yield per acre in bushels. That forecast, of course, must take the average size of ear into account.

Figures for 1956, which was a good year for corn over most of the country, give a basis for converting ear counts to bushels when corn is growing under favorable conditions.

In the South each ear counted in a row section, measured as indicated above, represents 5½ bushels per acre. In other words, if 6 ears are counted on the average row section, and if growing conditions are favorable, the yield per acre should be about 6 x 5½ or 33 bushels.

How To Estimate

In the Midwest, each ear counted on a row section means 7½ bushels per acre. In other words, 6 ears in the average row section would mean a yield of about 6 x 7½ or 45 bushels per acre.

These are average figures for the two regions in a good year. Ear sizes will be different from place to place and from year to year. But any grower can work out his own forecast by figuring how many ears are needed to make a bushel on his own farm. It takes about 70 pounds of reasonably dry ear corn to make a bushel.

When making this kind of a yield forecast, it is also important to remember that all corn in the field does not go to the crib or to the bin.

Studies made by statisticians of the Crop Reporting Board indicate that in the South and in the Corn Belt only about 90 percent of the corn produced in the field is actually hauled from the field at harvest time. The other 10 percent gets missed in the picking.

Here again, the amount missed on any one farm or in any one field may be more or less than average, depending upon the method of harvesting and the weather conditions at picking time.

A grower can figure out how much corn is left behind in his own fields by doing some gleaning after harvest to see how much is still in the field. Any corn found on the plants or on the ground after harvest on a measured row section can be multiplied by 1,000 to estimate the total per acre.

Walter Hendricks
Agricultural Estimates Division, AMS

Sweetclover Crop May Be Second Lowest Since 1948

Crop Reporting Board estimates 1957 production of sweetclover seed at 35.5 million pounds. White clover seed is estimated at 5.4 million pounds, Ladino clover at 4.0 million pounds, and alsike clover at 10.9 million pounds.

The sweetclover crop would be the second smallest since 1948, barely exceeding the low mark of 35.3 million pounds in 1956. Nearly three-fifths of the total production are concentrated in Minnesota, Texas, Kansas, and Nebraska. Anticipated imports will bolster the domestic supply.

In contrast, the estimated white clover seed production would exceed the 1956 figure by 19 percent and the 1946–55 average by 37 percent. It would be the third highest crop in history. Production is almost a fourth larger than last year in Idaho and Louisiana.

The Ladino crop is estimated at one-third under 1956 figures and 29 percent below average. Ninety percent of the current production is in California. Low prices and a burdensome carryover reduced acreage considerably this year.

The alsike crop figures to be only about 3 percent more than in 1956 and 20 percent below average. Idaho is the leading State this year with an indicated crop of 3.5 million pounds.

EGG-TYPE CHICKENS RAISED FEWEST ON RECORD

At a time when most other poultry numbers are at or near record highs, one poultry vital statistic stands at the lowest level since its first tally in 1909. It is the number of chickens raised for laying flock replacement.

Farmers are raising 394 million chickens this year for this purpose. These birds are 18 percent fewer than the number raised a year earlier.

Egg Prices Up

Prospective 1957–58 egg production won't be reduced in equal measure, but egg supplies are already tightening up and since midsummer egg prices have generally been above those of 1956. Prices are likely to continue higher than a year earlier for the next 8 or 9 months.

Several factors help to explain why neither laying flock population nor egg production for the ensuing year will be reduced by the same percentage measure as the reduction in the number of chickens raised.

When their intentions were surveyed in February 1957, farmers reported that they planned to buy 54 percent of their replacement chicks as sexed pullets, a slight increase from the 53 percent of 1956.

This fall the outlook for egg producers has brightened. At the same time farmers have a smaller total number of potential layers to draw from so there will be plenty of laying house space. Consequently, farmers will save every pullet they can. The result is likely to be that this fall they will house a larger-than-average percentage of the pullets they raised.

Typically, about two-thirds of the laying flock on each January 1 are pullets, in their first laying year, and about one-third are hens in their second or later laying year.

On an average about half of each year's pullets that are housed as layers die or are used for meat and half are retained as layers for a second year of egg production.

This year economics favor a greater-than-average retention of hens, just as has been described above to favor maximum retention of pullets. Fewer hens, therefore, are likely to be sold for meat this fall.

Modern hens, bred for intensive egg production, can lay well for more than a year. Recent low meat prices for such birds have induced some farmers to consider routinely keeping such birds a second year as an alternative to growing a correspondingly larger number of replacement pullets each spring.

The final factor which will partially offset the effects of fewer layers is the steady year-to-year increase in the number of eggs laid per bird.

In 1955 egg production per bird was 161; in 1956, 169; and in 1957 it has risen further. However, the prospective larger proportion of hens (which lay fewer eggs than pullets) may reduce the amount of the increase compared with the 8-egg rise from 1955 to 1956.

Fewer Eggs in 1958

These offsets to the reduced number of chickens raised will temper the effects of the cut so far as prospective egg supply is concerned, but they won't suffice to hold 1958 per person egg supplies at the 1957 level.

To keep supplies at a steady level per person, production has to rise with the annual gain of about 1.5 percent in the U. S. population.

However, with prospects for fewer layers this January 1 than last, egg production won't rise with the human population in 1958.

Egg prices well into 1958 are likely to continue above those of 1957.

Edward Karpoff
Agricultural Economics Division, AMS

YULE TREE STANDARDS ARE USDA'S GIFT TO GROWER

Better returns for less work—that's what selling your Christmas trees on the basis of Federal grades could mean to you. Grade standards become effective November 1 for application to this year's harvest.

Whether you are a large-scale grower of evergreen trees for the Christmas market—or one of the many farmers who have found that growing some Christmas trees is a profitable use of otherwise worthless acres—you may find Federal grades to your advantage.

Industry Wanted Standards

The new United States Department of Agriculture standards were developed at the request of State and national Christmas tree associations.

The Agricultural Marketing Service, which has issued the standards, will provide inspection service for Christmas trees at shipping points and at terminal markets. This service is voluntary and is available on a fee basis.

Grades will be based on five factors: Density, taper, balance, foliage, and deformities. The grades are U. S. Premium, U. S. No. 1, and U. S. No. 2. Any tree that can't qualify under one of these is listed as a cull.

In addition to meeting standard qualifications for grade, a graded Christmas tree will have to possess the characteristics of its species, have a handle approximately 1¼ inches long for each foot of tree height unless other handle length is specified, be smoothly cut across the butt, and all its side branches below the first whorl must have been removed.

The height of graded trees also will be specified in 1- or 2-foot units, such as 4 to 6 feet or 7 to 8 feet.

Lots of trees may be ordered on the basis of "standard bundles." The number of trees in such a "bundle" will depend on the height of the trees. For example, 4 trees would be contained in a standard bundle of trees 6 to 7 feet high.

Now, how do the new grades offer the possibility of making more money for you with less work?

Suppose, in the past you just cut off every tree you had growing in one field and sold the whole lot for whatever price you could get. You know that your return has not always been as good as you might have hoped. Dealers, however, claim that they cannot pay too high for such lots, since at times they have contained as much as 30 percent culls.

But suppose this year you find that a dealer to whom you have been shipping Christmas trees would like to buy U. S. No. 1 trees, and will pay what they are worth.

By assuring him that your trees will meet grade standards, you could complete a deal by telephone. Then, just by picking out and selecting only those trees that would meet U. S. No. 1 qualifications you would certainly have less work for more money.

How would you know that your trees meet the grade? Just call for inspection at the nearest shipping point or terminal market inspection office.

Allowances Made

The Government inspector will allow a tolerance of 10 percent, by count, for trees failing to meet the grade requirements. There is also a 10-percent allowance for trees failing to meet height requirements.

More detailed information on grades can be obtained by writing to Chief, Fresh Products Standardization and Inspection Branch, Fruit and Vegetable Division, Agricultural Marketing Service, U. S. Department of Agriculture, Washington 25, D. C.

George B. Dever, Jr.
Fruit and Vegetable Division, AMS

In This Issue

UNITED STATES
DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WASHINGTON 25, D. C.

Farmer's Share of Consumer's Food Dollar

July 1956	41 percent
June 1957	39 percent
July 1957	40 percent

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